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Remarks

Applicants request entry of the present amendment in the cited application. When this amendment is entered, claim 1 (amended), and dependent claims 2-9, 13, 39-41, 43-46, 49, 50, 53, 54, 60, 61, 72-75, 77 and 81-85 are pending. Reconsideration of the application is requested.

Summary of Telephone Interview on April 6, 2006

On April 6, 2006, Examiner Moran and the undersigned discussed the pending claims, the outstanding rejections, and an additional reference, US 6,591,852. Although some issues were resolved it was concluded that none of the pending claims were allowable. Further details concerning the interview are described below.

Amendment to Claim 1

The amendment made to independent claim 1 is supported by the specification and drawings as originally filed and does not add new matter to the application. Specifically, the described feature that the recited microchannel structure is uniform and regular along substantially each channel length is expressly set out in the specification at page 11, lines 25 and 26. Further, the various embodiments of the claimed invention illustrated in the drawings depict microchannels that are uniform and regular along each channel length.

Response to New Matter Rejection

During the telephone interview with Examiner Moran, the Examiner indicated that the paper dated March 27, 2006 and filed in response to the final office action mailed January 27, 2006 was sufficient to overcome any rejections based on the cited references but that the rejection under section 112, first paragraph was maintained. This new matter rejection was based on the recitation of the phrase "without any aid from any structures additional to the microchannels" that had been added to claim 1 in an earlier amendment. Applicants have now amended claim 1 to delete this phrase and submit that the only rejection of claim 1 (and

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related dependent claims) has now been traversed. Withdrawal of the rejection under section 112, first paragraph is requested.

Additional Reference

In addition to the new matter issue that was discussed during the interview, the Examiner also brought an additional document, US 6, 591,852, to the Applicants' attention. Applicants submit that this additional reference does not teach or suggest the now claimed invention. Briefly, US 6,591,852 reports using passive fluid flow barriers to control fluid flow through microchannels. These reported barriers are abrupt microchannel widenings in the microchannels (see, for example the abstract). In short, the reported structure of the microchannels in US 6, 591,852 is not uniform and regular along substantially each channel length. For this reason alone, the document does not teach or suggest the now claimed invention.

Conclusion

In view of the present amendments and remarks, Applicants submit that the pending claims, as amended, are in condition for allowance and request that the Examiner pass the application to issuance.

Respectfully Submitted,

RAYMOND P. JOHNSTON et al.

By:

Paul W. Busse, #32,403 FAEGRE & BENSON LLP 2200 Wells Fargo Center 90 South Seventh Street Minneapolis, MN 55402-3901 612/766-7046

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